IN THE CLAIMS

1. (Currently Amended) A lens array, comprising:

multiple lenses in a monolithic structure, for collecting light from an array of multiple LED light sources;

wherein each LED light source emits divergent light,

wherein for each LED light source there is a lens having a first surface with a compound shape of at least ~~one~~ two curved portions ~~and~~ separated by a flat portion that is distributable around the LED light source and arranged to collimate the light from the LED, wherein each curved ~~surface~~ portion is centered about a radius R extending from a center point that lies directly above an imaginary light point source on ~~each of the sides~~ one side of the LED with each curved portion centered over the imaginary light point source on each side, and

wherein each lens has a spherical or an aspheric shape relative to its respective LED light source.

2. (Previously presented) The lens array of claim 1, wherein the curved portions ~~is~~ are equidistant from the center line of the LED light source and the flat portion is perpendicular to the center line.

3. (Previously presented) The lens array of claim 1, wherein each of the offset spherical or aspheric shapes are offset from a center line extending through the each LED light source.

4. (Previously presented) The lens array of claim 1, wherein each of the lenses is symmetric about a center line extending through each LED light source.

5. (Previously presented) The lens array of claim 1, wherein each of the lenses includes sections that collect light from respective portions of each LED light source.

6. (Previously presented) The lens array of claim 5, wherein each lens section is optimized for each portion of each LED light source from which each section collects light.

7. (Previously presented) The lens array of claim 1, wherein each of the lenses includes an offset aspheric shape.

8. (Currently Amended) The lens array of claim 7, wherein each of the lenses has a faceted surface that approximates the offset aspheric shape.

9. (Previously presented) The lens array of claim 8, wherein each of the faceted surfaces has a symmetrically circular shape.

10. (Previously presented) The lens array of claim 8, wherein each of the faceted surfaces has a square tile pattern.

11. (Previously presented) The lens array of claim 10, wherein the square tile pattern fully fills a surface of each of the lenses.

12. (Previously presented) The lens array of claim 10, wherein the square tile pattern is formed from micro-pyramids.

13.-18. (Canceled)

19.-20. (Canceled)

21. (Canceled)

22.-26. (Canceled)

27. (Canceled) The LED module of claim 26, wherein the square tile pattern fully fills a surface of each lens.

28. (Canceled) The LED module of claim 26, wherein the square tile pattern is formed from micro-pyramids.

29. (Canceled)

30. (Currently Amended) A method of manufacturing an LED light module, comprising:

determining a configuration for an array of lenses so that there is a separate lens for each LED,

wherein each lens has a first surface having a compound shape including a curved portion that is distributed around an LED arranged to collimate the light from the LED, and

wherein each lens having a compound shape that includes curved portions separated by a flat portion,

the lens being disposed over an LED so that light from each side of the LED is projected into a respective curved surface; and

each curved ~~surface~~ portion is centered about a radius R extending from a center point that lies directly above an imaginary light point source on each ~~of the LED's sides~~ one side of the LED with each curved portion centered over the imaginary light point source on each side so that each curved ~~surface~~ portion is effectively a plano-convex lens centered over a side of the LED.

31. (Canceled)

32. (Previously presented) The method of claim 30, wherein the lens array is monolithically molded.

33. (Previously presented) The method of claim 30, wherein each lens in the lens array is fabricated by machining faceted surfaces into the lens array.

34. (Previously presented) The method of claim 33, wherein the shape of the lens array is formed by machining a mold using a drill bit-type tool.

35. (Previously presented) The method of claim 34, wherein each lens in the lens array is machined using a circularly symmetric pattern.

36. (Previously presented) The method of claim 33, wherein the shape of the lens array is formed by machining a mold using a surface lathe, router, or grinder.

37. (Previously presented) The method of claim 36, wherein each lens in the lens array is machined using micro-pyramids in a square tile pattern.

38. (Previously presented) The method of claim 32, wherein the lens array is formed by molding potting gel.

39. (Previously presented) The method of claim 30, wherein the lens array is formed of glass.

40. (Original) The method of claim 39, wherein each lens in the lens array is circularly symmetric.

41. (Original) The method of claim 39, wherein each lens in the lens array is formed of micro-pyramids in a square tile pattern.

42. (Canceled)

43. (Currently Amended) The lens array as in claim ~~42~~ 1 wherein the curved portion is spherical.

44. (Currently Amended) The lens array as in claim ~~42~~ 1 wherein the curved portion is aspherical.

45. (Currently Amended) The lens array as in claim ~~42~~ 1 wherein the curved portion is faceted.

46. (Currently Amended) The lens array as in claim ~~42~~ 1 wherein the curved surface is a micro-pyramid.